United States Department of Agriculture

NRCS

Natural Resources Conservation Service
National Water and Climate Center
101 SW Main Street, Suite 1600
Portland, OR 97204-3224

Date: **January 10, 2003**

Subject: **January 1, 2003 Western Snowpack Conditions and Water Supply Forecasts**

The following information is provided for your use in describing climate and water supply conditions in the West as of January 1, 2003.

OVERVIEW

As of January 1, 2003, nearly every western state is forecast to receive below average spring runoff from a meager January snowpack. The only exceptions are in California and western New Mexico, which are forecast to receive near, or above average spring streamflows. Below average water supply forecasts come on the heels last year's record low, or near record low, runoff in the Southwest, Intermountain West and southern Rockies. In many of these areas, this year's snowpack is resting on very dry soils, which generally translates into reduced snowmelt runoff. Additionally, the reservoir storage for all western states is running well below their January averages.

SNOWPACK

January 1, 2003 snowpack map (Figure 1) clearly reflects the below average snowpacks that are a concern at this time. Below average snowpacks (70% to 89%) predominate throughout the Pacific Northwest, northern Rockies, Intermountain West and Southwest. Several basins in western Montana, northern Idaho, central Wyoming, Utah, Nevada, northern Arizona and western Oregon report significantly below or well below average snowpacks (<50% to 69%). The only states reporting well above, to significantly above average snowpacks (110% to >150%) are basins in California, southwest Oregon and northeastern New Mexico.

Most Alaska snowpacks are significantly below or well below average (<50% to 89%). Alaska has experienced warm temperatures this winter, which have inhibited snowpack accumulation.

A map containing a daily update of the westwide snowpack may be obtained from the following URL - http://www.wcc.nrcs.usda.gov/water/w_qnty.html

SEASONAL PRECIPITATION

Seasonal precipitation (October 1, 2001 to December 31, 2001) reflects a similar pattern to the snowpack westwide. Montana, eastern Wyoming, southeastern Colorado, northern Utah, central Nevada and central Arizona report below, to well below, average precipitation (50% to 89%). The Pacific Northwest and Intermountain states also report below average seasonal precipitation. Significantly below average precipitation (<50%) is shown in eastern Montana and southern Arizona. In contrast to the dearth of precipitation throughout most of the West, southwest Oregon, central and northern California report above, to significantly above, seasonal precipitation (110% to >150%). Alaska's seasonal precipitation varies dramatically due to the

warm rain events of the fall. South coastal areas are well above average while the interior is significantly below average.

SPRING AND SUMMER STREAMFLOW FORECASTS

The January 1, 2003 water supply forecasts (Figure 3) paints a picture of either below, or much below, average streamflow (50% to 89%) over most of the West. Only basins in the Lake Tahoe area of California and Nevada and northwestern California are forecast to receive above average (110% to 129%) spring streamflow. The Zuni/Bluewater basins in New Mexico are forecast to receive near, to slightly above average spring runoff.

These low water supply forecasts follow last year's (2002) extremely low runoff for many Southwestern and Rocky Mountain basins.

Alaska water supply forecasts are not issued until April. Specific state streamflow summaries can be obtained from the Internet location - http://www.wcc.nrcs.usda.gov/water/snow/bor.pl

RESERVOIR STORAGE

As of January 1, 2003, the total storage for all major western storage reservoirs in each state is below seasonal averages (Figure 4). This reflects the carryover dryness of last year's drought in the Rockies and the continued drought resulting from this water year's seasonal precipitation deficiencies throughout most of the West.

FOR MORE INFORMATION

The National Water and Climate Center Homepage provides the latest available snowpack and water supply information. Please visit us at http://www.wcc.nrcs.usda.gov

/s/ RON MARLOW
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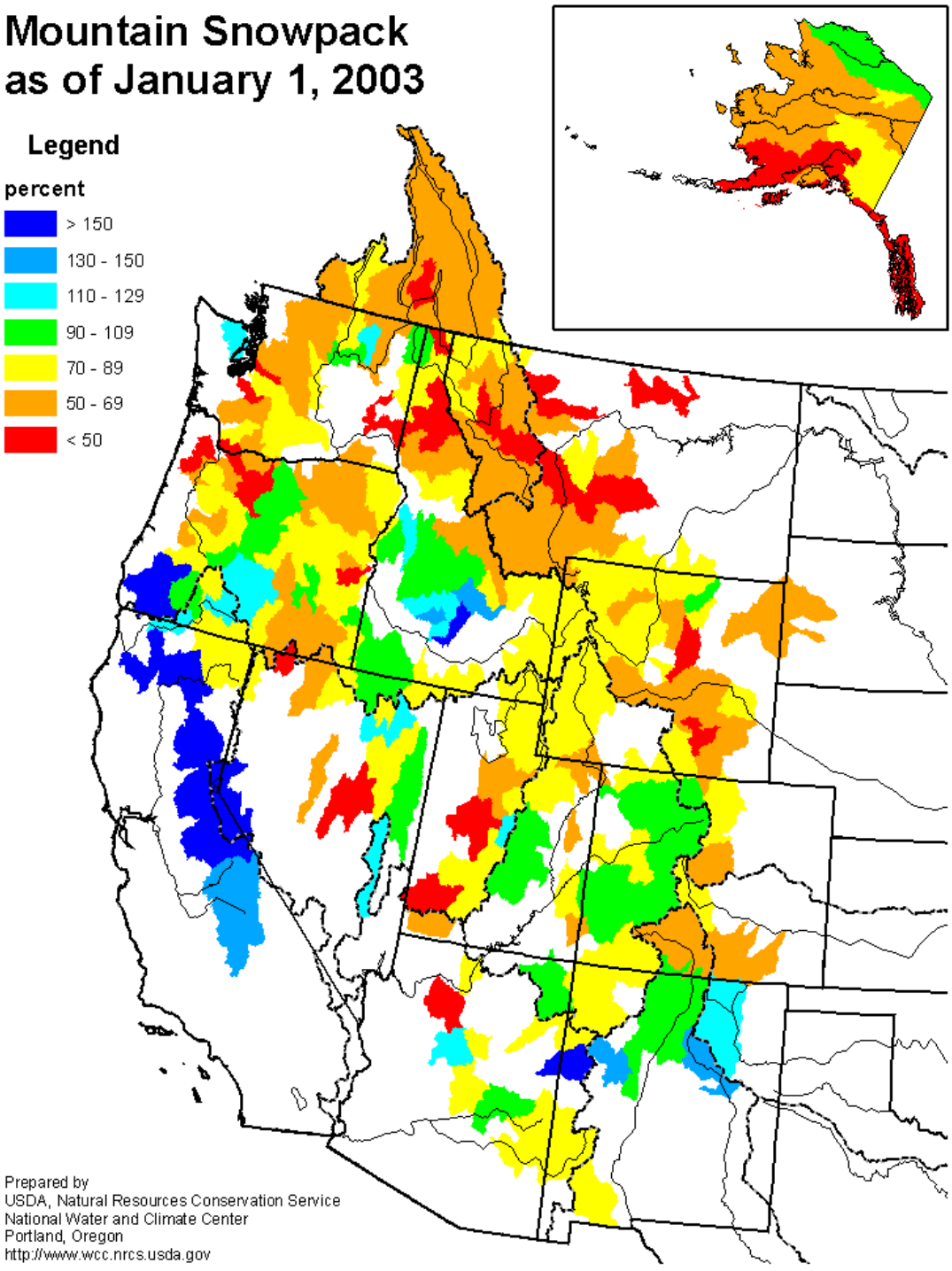

Figure 1. January 1, 2002 Snowpack

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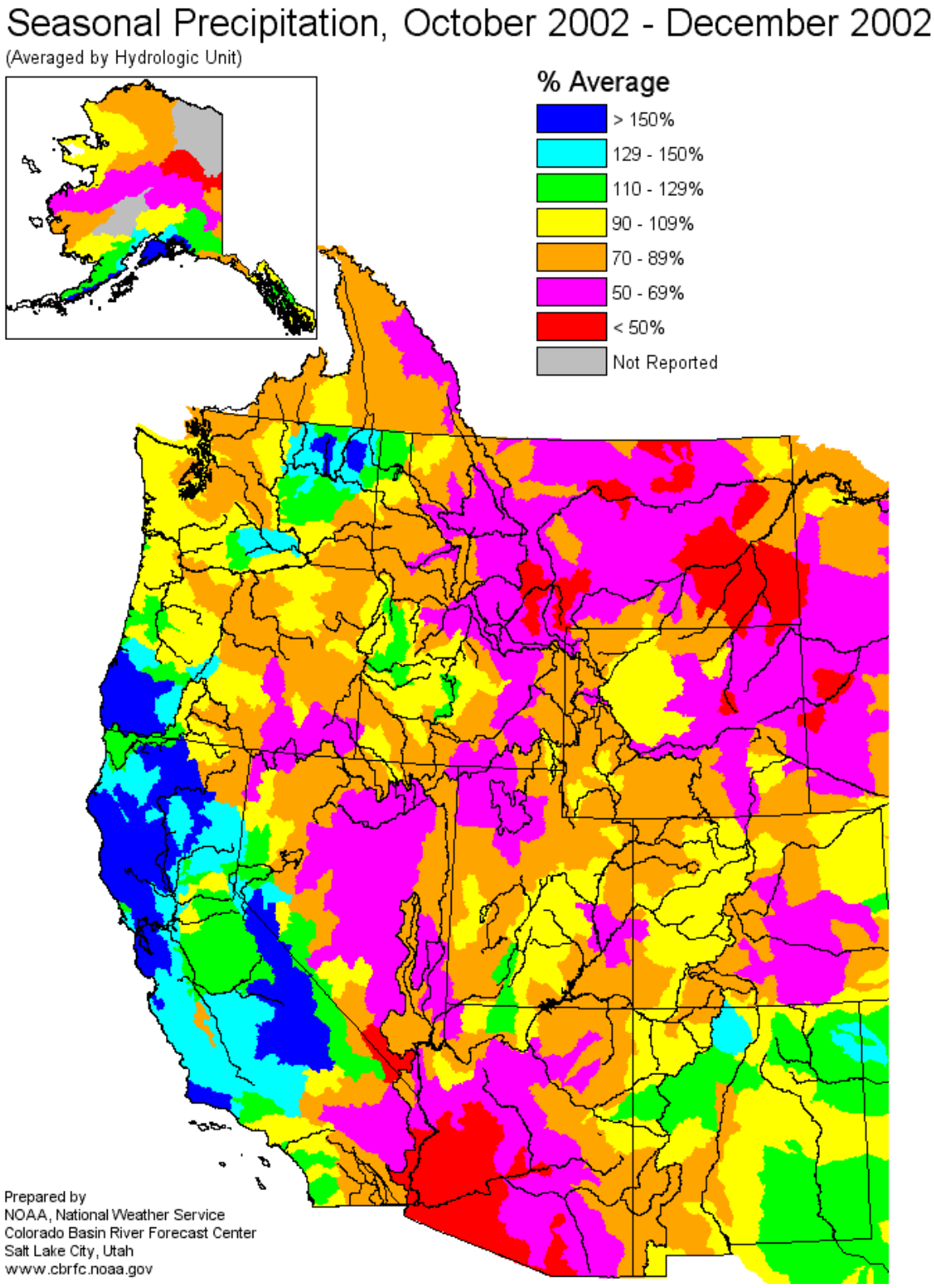

Figure 2. Seasonal Precipitation to Date Starting October 1, 2002

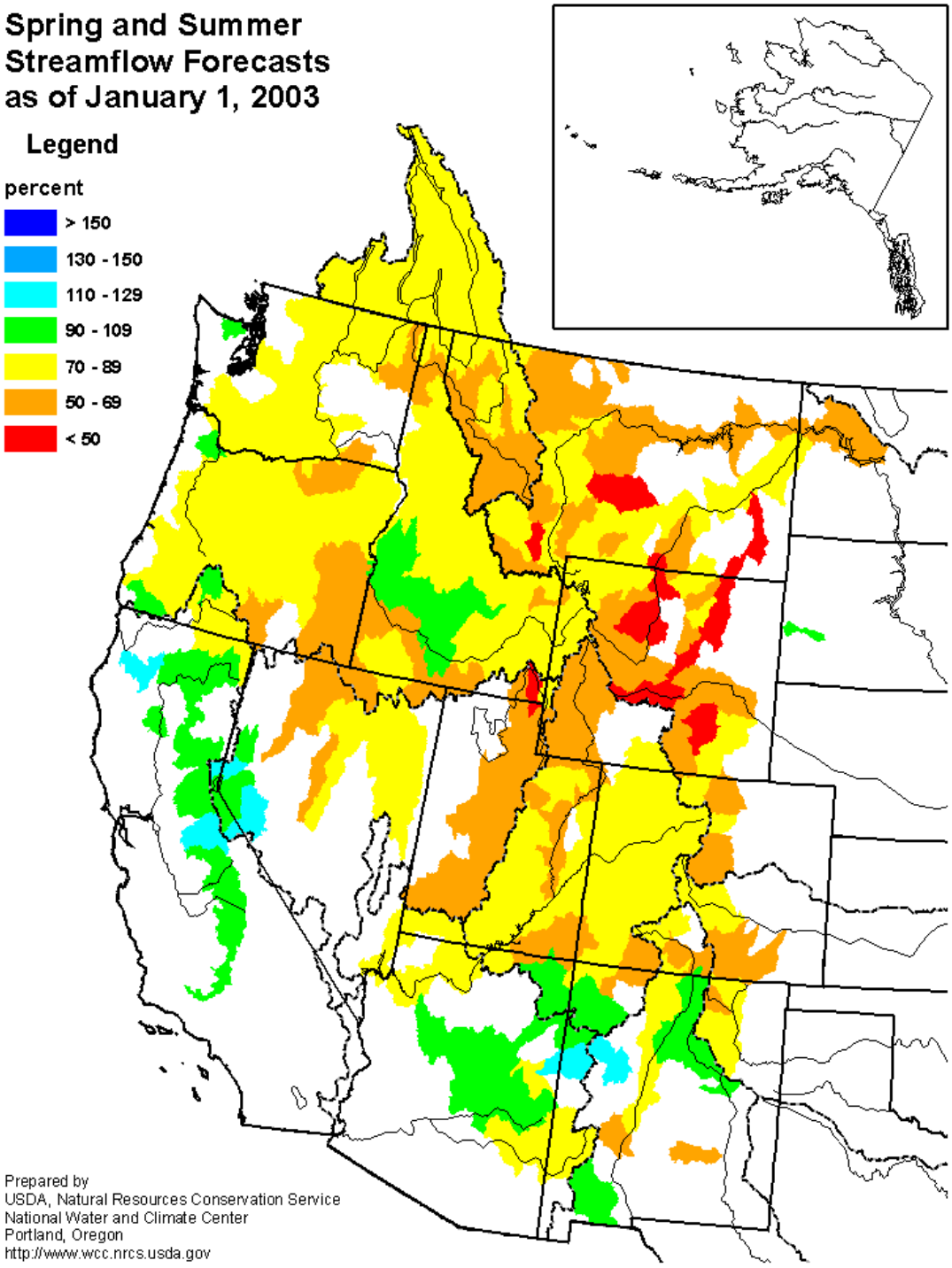

Figure 3. Seasonal Water Supply Forecasts - January 1, 2003

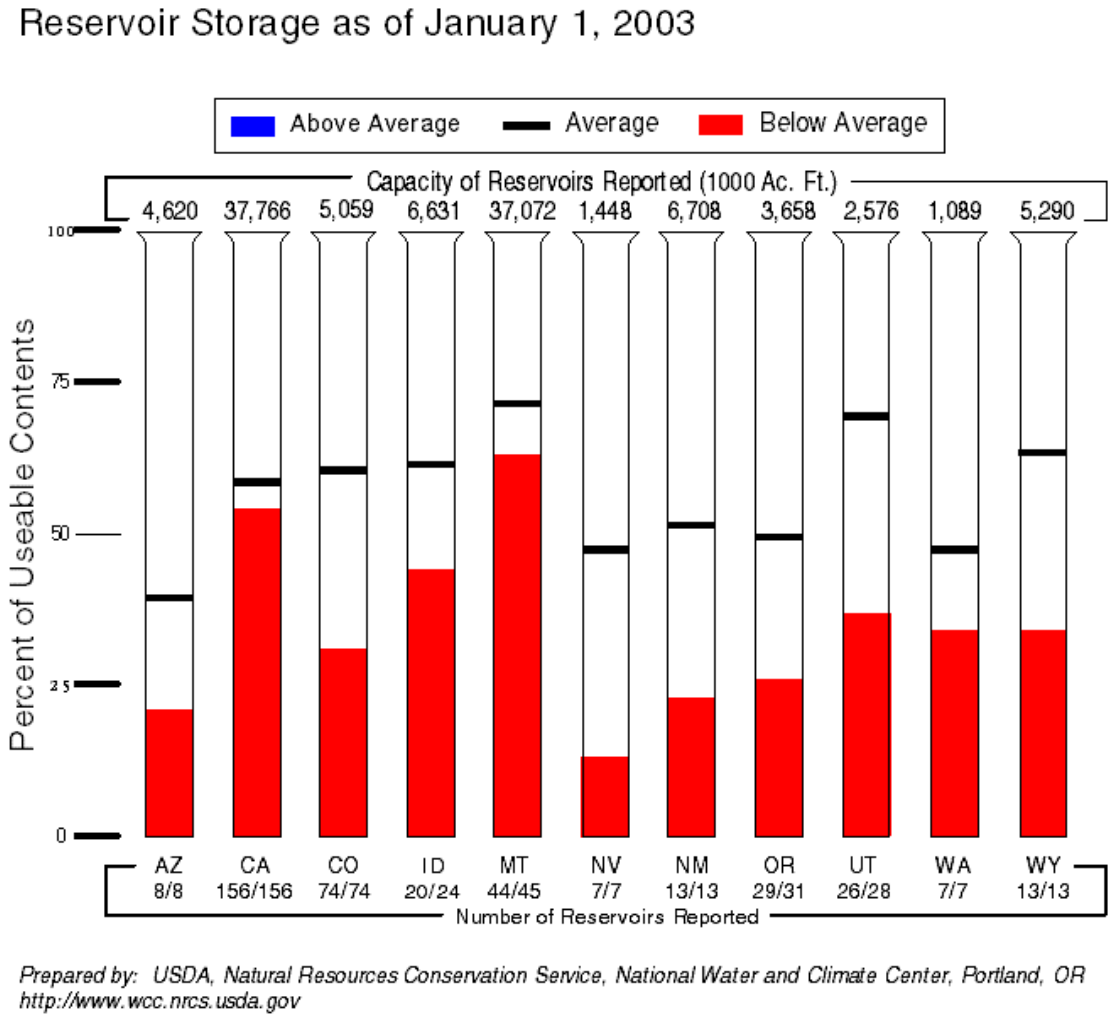

Figure 4. Current Reservoir Storage - January 1, 2003